

Supplementary Table S2. Clinicopathological and molecular characteristics of PD-L1+(I) versus PD-L1–(I) subgroups of MSI-H CRCs (n = 208): summary of insignificant results

| Variables | No. of cases | PD-L1+(I) (n = 62) | PD-L1–(I) (n = 146) | P-value |
|--------------------------------|--------------|-----------------------|------------------------|---------|
| Age | | | | |
| Younger (< 58 years) | 98 (47%) | 33 (53%) | 65 (45%) | 0.25 |
| Older (≥ 58 years) | 110 (53%) | 29 (47%) | 81 (55%) | |
| Gender | | | | |
| Male | 109 (52%) | 32 (52%) | 77 (53%) | 0.882 |
| Female | 99 (48%) | 30 (48%) | 69 (47%) | |
| Tumour location | | | | |
| Proximal | 134 (64%) | 43 (69%) | 91 (62%) | 0.333 |
| Distal/rectal | 74 (36%) | 19 (31%) | 55 (38%) | |
| Tumour multiplicity | | | | |
| Solitary | 186 (89%) | 53 (85%) | 133 (91%) | 0.229 |
| Multiple | 22 (11%) | 9 (15%) | 13 (9%) | |
| Gross tumour type | | | | |
| Polypoid/fungating | 149 (72%) | 50 (81%) | 99 (68%) | 0.06 |
| Ulceroinfiltrative | 59 (28%) | 12 (19%) | 47 (32%) | |
| Invasive growth pattern | | | | |
| Expanding | 153 (74%) | 47 (76%) | 106 (73%) | 0.632 |
| Infiltrating | 55 (26%) | 15 (24%) | 40 (27%) | |
| Lymphovascular invasion | | | | |
| Absent | 154 (74%) | 50 (81%) | 104 (71%) | 0.157 |
| Present | 54 (26%) | 12 (19%) | 42 (29%) | |
| Perineural invasion | | | | |
| Absent | 191 (92%) | 59 (95%) | 132 (90%) | 0.253 |
| Present | 17 (8%) | 3 (5%) | 14 (10%) | |
| Crohn-like lymphoid reaction | | | | |
| Inactive (largest LA < 1 mm) | 123 (61%) | 37 (61%) | 86 (61%) | 0.964 |
| Active (largest LA ≥ 1 mm) | 79 (39%) | 24 (39%) | 55 (39%) | |
| Tumour grade (differentiation) | | | | |
| G1/G2 (WD/MD) | 165 (79%) | 48 (77%) | 117 (80%) | 0.658 |
| G3 (PD) | 43 (21%) | 14 (23%) | 29 (20%) | |
| Tumour budding | | | | |
| Negative (< 5 buds) | 166 (80%) | 50 (81%) | 116 (79%) | 0.845 |

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| Positive (≥ 5 buds) | 42 (20%) | 12 (19%) | 30 (21%) | |
| Signet ring cell component | | | | |
| Absent | 188 (90%) | 59 (95%) | 129 (88%) | 0.128 |
| Present | 20 (10%) | 3 (5%) | 17 (12%) | |
| Medullary component | | | | |
| Absent | 202 (97%) | 59 (95%) | 143 (98%) | 0.366 |
| Present | 6 (3%) | 3 (5%) | 3 (2%) | |
| Serrated component | | | | |
| Absent | 185 (89%) | 57 (92%) | 128 (88%) | 0.37 |
| Present | 23 (11%) | 5 (8%) | 18 (12%) | |
| Cribriform comedo component | | | | |
| Absent | 194 (93%) | 58 (94%) | 136 (93%) | 1 |
| Present | 14 (7%) | 4 (6%) | 10 (7%) | |
| MLH1 expression | | | | |
| Negative (deficient) | 131 (63%) | 41 (66%) | 90 (62%) | 0.54 |
| Positive (proficient) | 77 (37%) | 21 (34%) | 56 (38%) | |
| MSH2 expression | | | | |
| Negative (deficient) | 64 (31%) | 23 (37%) | 41 (28%) | 0.198 |
| Positive (proficient) | 144 (69%) | 39 (63%) | 105 (72%) | |
| MSH6 expression | | | | |
| Negative (deficient) | 71 (34%) | 23 (37%) | 48 (33%) | 0.557 |
| Positive (proficient) | 137 (66%) | 39 (63%) | 98 (67%) | |
| PMS2 expression | | | | |
| Negative (deficient) | 138 (66%) | 41 (66%) | 97 (66%) | 0.966 |
| Positive (proficient) | 70 (34%) | 21 (34%) | 49 (34%) | |
| CIMP | | | | |
| CIMP-L/0 | 156 (75%) | 48 (77%) | 108 (74%) | 0.6 |
| CIMP-H | 52 (25%) | 14 (23%) | 38 (26%) | |
| MLH1 methylation | | | | |
| Unmethylated | 148 (71%) | 43 (69%) | 105 (72%) | 0.709 |
| Methylated | 60 (29%) | 19 (31%) | 41 (28%) | |
| KRAS mutation | | | | |
| Wild-type | 160 (80%) | 50 (85%) | 110 (77%) | 0.243 |
| Mutant | 41 (20%) | 9 (15%) | 32 (23%) | |
| BRAF mutation | | | | |
| Wild-type | 185 (89%) | 59 (95%) | 126 (86%) | 0.062 |

| | | | | |
|---|-----------|----------|----------|-------|
| Mutant | 23 (11%) | 3 (5%) | 20 (14%) | |
| Hereditary vs. sporadic type | | | | |
| Suspected LS-associated | 134 (64%) | 42 (68%) | 92 (63%) | 0.515 |
| Sporadic | 74 (36%) | 20 (32%) | 54 (37%) | |
| Abbreviations: PD-L1+(T), PD-L1-positive in tumour cells; PD-L1 – (T), PD-L1-negative in tumour cells; MSI-H, microsatellite instability-high; CRCs, colorectal cancers; LA, lymphoid aggregate; WD, well differentiated; MD, moderately differentiated; PD, poorly differentiated; CIMP, CpG island methylator phenotype; CIMP-0, CIMP-negative; CIMP-L, CIMP-low; CIMP-H, CIMP-high; LS, Lynch syndrome | | | | |